

NS-US035107

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor Application of

Makoto OHTAKE et al.

Patent Art Unit: 1764

Serial No.: 10/700,514

Filed: November 5, 2003

For: PARTICULATE FILTER REGENERATING:
DEVICE

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner of Patents
Washington, DC 20231

Sir:

In accordance with MPEP 609 and 37 C.F.R. §§ 1.56, 1.97 and 1.98, Applicants bring the attached Non-US reference to the Examiner's attention and request that it be considered and made of record in this application. Also attached are a completed PTO-1449 form and the March 30, 2004 European Search Report. *No fee is believed to be due for this Information Disclosure Statement.* However, if a first Office Action on the merits was mailed before the filing date of this Information Disclosure Statement, the Commissioner is authorized to charge the fee set forth in 37 CFR § 1.17(p) to Deposit Account No. 50-1836. A duplicate copy of this Statement is enclosed for that purpose.

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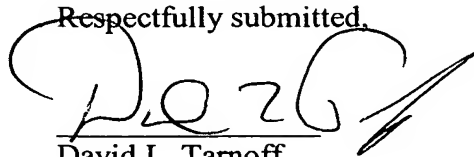
French Patent Publication No. 2 774 424 appears to disclose a control unit (7) for a diesel engine exhaust system with a particle filter. The control unit (7) controls the fuel injectors in each cylinder, and also monitors the pressure drop across the filter and the temperature of the filtered gas. In cases when the exit temperature is considered too high, the control unit closes the exit valve reducing the gas flow and oxygen available for combustion in the filter. The fuel injectors (5) in each cylinder (1), supplied from e.g. a common rail (5), are controlled by the control unit (7), which also monitors the pressure drop across the filter and the temperature of the filtered gases. The gases arrive at the filter via a turbocompressor (3) and exit through a valve (8), also controlled by the unit. If, during the filter's regenerative phase, or under certain engine conditions, the exit temperature exceeds a predetermined

threshold, or its rate of rise is excessive in relation to the operating condition, a too violent soot combustion is indicated. To prevent damage to, or even destruction of, the filter, the control unit closes the exit valve, reducing the gas flow and the oxygen available for combustion in the filter.

* * *

Prompt examination on the merits is respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'D. L. Tarnoff', with a long horizontal stroke extending to the right.

David L. Tarnoff
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